

WHAT IS CLAIMED IS:

1. A method to perform a scheduled action of a plurality of devices (13, 14) that are connected via a network, comprising the steps of:

5 calculating an individual triggering time for each device (13, 14) that
is to perform a predetermined action at a predetermined time;
and
utilizing said individual triggering time for each device (13, 14) to
perform said scheduled action.

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2. The method according to claim 1, wherein said individual triggering time is calculated based on a synchronous start time of said scheduled action and an individual start-up time that a respective device (13, 14) requires to perform said predetermined action.

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3. The method according to claim 2, wherein the individual start-up time that said respective device (13, 14) needs to perform said predetermined action is based on the worst-case start-up time that the respective device (13, 14) requires to perform said predetermined action.

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4. The method according to claim 2, wherein the individual start-up time that said respective device (13, 14) requires to perform said predetermined action is based on a current state of the respective device (13, 14).

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5. The method according to claim 1, wherein a resource manager (12) of the network respectively transmits said predetermined action and said predetermined time of said scheduled action to said each device (13, 14) that is to perform said predetermined action at said predetermined time.

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6. The method according to anyone of claims 1 to 5, wherein every device (13, 14) calculates its individual triggering time itself.

7. The method according to claim 6, wherein said each device (13, 14) sets an internal clock with the calculated individual start-up time that triggers said each device (13, 14) at its individual triggering time.

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8. The method according to claim 6, wherein said each device (13, 14) transmits said triggering time to a clock device (15) of the network.

9. The method according to claim 4, wherein a resource manager (12) of the network respectively transmits said predetermined action and said predetermined time of said scheduled action for said each device (13, 14) that is to perform said predetermined action at said predetermined time to a clock device (15) of the network, or to another control device in the network, and respectively, said predetermined action to the respective device (13, 14), and said each device (13, 14) that is to perform said predetermined action at said predetermined time transmits its individual start-up time needed to perform the predetermined action to said clock device (15) or to said another control device.

20 10. The method according to claim 9, wherein said clock device or said another control device calculates the individual triggering time for said each device (13, 14).

11. The method according to claim 10, wherein said another control device transmits its calculated triggering times for said each device (13, 14) to said clock device (15).

12. The method according to claim 11, wherein said another control device may also be the resource manager (12).

13. The method according to claim 8, wherein said clock device (15) triggers said each device (13, 14) at the individual triggering time for said each device (13, 14).

5 14. The method according to claim 1, wherein said network is a home network.

15. The method according to claim 1, wherein said network is a 1394-based network.

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16. The method according to claim 1, wherein said each device (13, 14) is a consumer electronic device.

17. A system for performing a scheduled action with network devices,

15 comprising:

means for managing scheduling information for a network action on
said electronic network;

a first network device coupled to said electronic network for
accessing said scheduling information and first device timing
information to generate first device triggering information;

20 a second network device coupled to said electronic network for
accessing said scheduling information and second device
timing information to generate second device triggering
information; and

25 a clock device for utilizing said first device triggering information to
activate said first network device, and for utilizing said second
device triggering information to activate said second network
device to thereby accurately performing said scheduled action
of said electronic network.

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18. The system of claim 17 wherein said first device timing information is based on a first startup time of said first network device, and wherein said second device timing information is based on a second startup time of said second network device.

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19. The system of claim 17 wherein said means for managing scheduling information includes an invoking application and a resource manager.

10 20. The system of claim 17 wherein said electronic network functions in accordance with a home audio-video interoperability specification.

21. A system for managing a scheduled action in an electronic network comprising:

15 an invoking application configured to generate action invocation information corresponding to said scheduled action;
 a resource manager configured to handle said action invocation information to thereby control one or more network devices to perform said scheduled action.

20 22. The system of claim 21 wherein said resource manager passes said action invocation information to one or more device control modules that respectively correspond to, and control said one or more network devices.

25 23. The system of claim 22 wherein said one or more device control modules each build an internal agenda for reservation of said one or more network devices to perform said scheduled action.

30 24. The system of claim 23 further comprising a plurality of scheduled actions, and wherein said one or more device control modules each check for whether said one or more network devices will be able to simultaneously perform said plurality of scheduled actions.

25. The system of claim 21 wherein a trigger device notifies said resource manager to begin said scheduled action.